

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5 Jul 2011 has been entered.

Response to Arguments

Applicant's arguments with respect to all current claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

Claims 7-9 are objected to because of the following informalities:

In claim 7 / line 19, "**the desired depth**" lacks antecedence.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-9 and 19-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davison (US 4710075) in view of Green et al. (US 2003/0097133).

As to claims 7, 8, 22, and 24, Davison discloses a system (see at least FIGS. 1 and 5) for forming a channel in a bone comprising a guide wire (80) having a leading (distal 80) and trailing (proximal end) end; a rotatable boring tool (12) having a wall (outer 12) surrounding an axial bore (64) for slidably receiving said guide wire, said tool having a first end (distal 12) including a cutting element (at 14) and a drive end (proximal 12) capable of being connected to a power source for rotating said tool to bore into bone, said bore being capable of permitting said guide wire to slide axially through said bore when said tool is connected to said power source and while said tool is boring into bone; wherein the guide wire is extendable into the bone distally beyond the cutting element of the boring tool and up to the desired depth of the channel to be formed by the cutting element (see FIG. 5); wherein the guide wire is a Kirschner wire (see FIG. 5).

Davison discloses the claimed invention except for said wall adjacent said drive end having an elongated opening therethrough in communication with said bore, said elongated opening being adapted to permit viewing of axial sliding movement of said guide wire trailing end during rotation of said boring tool while said tool is connected to said power source and said tool is boring into bone; wherein said opening is in the form of an elongated slot; wherein the elongated opening has a first end and a second end,

the first end being spaced from the drive end of the boring tool, and the second end of the opening being located closer to the cutting element than the first end of the opening.

Green discloses a reaming assembly (100) wherein the cutting tool has a wall near said drive end having an elongated opening (126) therethrough in communication with said bore, said elongated opening being adapted to permit viewing of axial sliding movement of said guide wire trailing end during rotation of said boring tool while said tool is connected to said power source and said tool is boring into bone (see FIG. 11); wherein said opening is in the form of an elongated slot (see FIG. 11); wherein the elongated opening has a first end (proximal 126) and a second end (distal 126), the first end being spaced from the drive end of the boring tool, and the second end of the opening being located closer to the cutting element than the first end of the opening (inherently) for allowing the flow of irrigation fluids to the head (§48).

At the tie of invention, it would have been obvious to a person of ordinary skill in the art to have modified the device of Davison with a reaming assembly wherein the cutting tool has a wall near said drive end having an elongated opening therethrough in communication with said bore, said elongated opening being adapted to permit viewing of axial sliding movement of said guide wire trailing end during rotation of said boring tool while said tool is connected to said power source and said tool is boring into bone; wherein said opening is in the form of an elongated slot; wherein the elongated opening has a first end and a second end, the first end being spaced from the drive end of the boring tool, and the second end of the opening being located closer to the cutting

element than the first end of the opening in view of Green for allowing the flow of irrigation fluids to the head.

As to claim 9 as applied to claims 7 and 8 above, Davison and Green disclose the claimed invention except for, *i.e.* is silent on, wherein the slot and a second slot are located on opposite sides of said wall. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Davison and Green having a plurality of openings, since the mere duplication of the essential working parts of a device involves only routine skill in the art, and the instant application makes it clear that embodiments with one or multiple openings are interchangeable (see ¶21).

As to claims 19-21, 23, and 25, Davison discloses a boring tool (see at least FIGS. 1 and 5) for bone, comprising a shank (12) having a rotatable cutting tool (14) at a first distal end thereof (at 14), the shank and cutting tool having a cannulation (64) therethrough, the shank having a drive portion (proximal 12) at a proximal end thereof, the shank having a radially outwardly extending slidable lock portion (26) between the shank distal end and the drive portion, the lock portion being slidable distally and proximally along the shank (see FIGS. 2-4), the distal end of the shank spaced distally of the lock portion and the drive portion spaced proximally of the lock portion (see FIG. 1); and a guide wire (80) slidably received within the cannulation in the shank and cutting tool, the guide wire being extendable into a bone distally beyond the cutting tool of the shank and up to a desired depth of a bore to be formed by the cutting tool (see FIG. 5); wherein the guide wire is a Kirschner wire (see FIG. 5).

Davison discloses the claimed invention except for the shank having a pair of diametrically opposed windows therein, the guide wire having a trailing end viewable through the windows in the shank; wherein each one of the pair of diametrically opposed windows has a first end and a second end, the first end of each window being spaced from the drive portion, and the second end of each window being located closer to the cutting tool than the first end of the respective window.

Green discloses a reaming assembly (100) having a shank (102) having a window therein (126) such that the guide wire having a trailing end viewable through the windows in the shank (see FIG. 11); wherein the windows has a first end (proximal 126) and a second end (distal 126), the first end of each window being spaced from the drive portion, and the second end of each window being located closer to the cutting tool than the first end of the respective window (inherently) for allowing the flow of irrigation fluids to the head (§48).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to have modified the device of Davison with a reaming assembly having a shank having a window therein such that the guide wire having a trailing end viewable through the windows in the shank; wherein the windows has a first end and a second end, the first end of each window being spaced from the drive portion, and the second end of each window being located closer to the cutting tool than the first end of the respective window in view of Green for allowing the flow of irrigation fluids to the head.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Davison and Green having a

plurality of openings, since the mere duplication of the essential working parts of a device involves only routine skill in the art, and the instant application makes it clear that embodiments with one or multiple openings are interchangeable (see ¶21).

Additionally, at the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to space the openings of Davison and Green diametrically because Applicant has not disclosed that this provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Davison and Green's device, and applicant's invention, to perform equally well with either the spacing taught by Davison and Green or the claimed diametrical spacing because both would perform the same function of viewing the guide wire go up and down the shaft. Therefore, it would have been *prima facie* obvious to modify Davison and Green to obtain the invention as specified in claims 19-21, 23, and 25 because such a modification would have been considered a mere design consideration which fails to patentably distinguish over the prior art of Davison and Green

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael T. Schaper whose telephone number is (571) 270-7413. The examiner can normally be reached on Monday – Friday, 9AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, ***please contact the examiner's supervisor, Thomas Barrett, at (571) 272-4746.*** The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

If there are any inquiries that are not being addressed by first contacting the Examiner or the Supervisor, you may send an email inquiry to

TC3700_Workgroup_D_Inquiries@uspto.gov.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. T. S./
Examiner, Art Unit 3775

/Thomas C. Barrett/
Supervisory Patent Examiner, Art
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